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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,602

03/17/2004

Taketo Itoh

0445-0348PUS1

4176

2292

7590

04/17/2006

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EXAMINER

HILL, LAURA C

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO/ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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10/ 801 602

EXAMINER
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ART UNIT	PAPER
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20060411

DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

## Office Action Summary

Application No.

10/801,602

Applicant(s)

ITOH ET AL.

Examiner

Laura C. Hill

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 14 February 2006 have been fully considered but they are not persuasive.

1. In response to Applicant's arguments that Okuda does not disclose or suggest the claimed invention since the Examiner has equated "stress" in Okuda with applicants' claims provide for areas of low and high "stiffness" (see Remarks pages 8-9), it is noted that Okuda discloses the areas with high and low stresses can be equated to areas of low and high stiffness as discussed in the Office action dated 14 November 2005 and for the reasons set forth herein. Applicant has defined the "low stiffness region" as 'a three-dimensional part that contains the absorbent member 4 in its thickness when stretched flat and seen from above as in Fig. 1' (see instant Specification, page 7, lines 4-6) and that 'the low stiffness regions R1 is an oblong region provided along each longer side edge of the absorbent member 4 in the region R' (see instant Specification, page 7, lines 7-9). Stiffness is given its broadest reasonable definition meaning consistent with the specification of 'the resistance of an elastic body to deflection by an applied force' (Wikipedia online encyclopedia, 2006 and see also description of measuring the bending stiffness on pages 8-9 of the instant Specification). Stress is defined as a measure of force per unit area within a body that reacts to the loads applied to it (Wikipedia online encyclopedia, 2006). Therefore stiffness and stress are interrelated and interchangeable variables since they both measure the amount of force applied to a body and how that body reacts/deflects/resists said amount of force. Okuda

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discloses high and low "stiffness" regions since the regions display a resistance to applied force.

***Specification***

2. The title has been changed to the following: Disposable Diaper with Standing Gathers for Easy Article Application in a Standing Position.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okuda et al. (WO 00/53140A1; herein 'Okuda'). Regarding claim 1 Okuda discloses disposable diaper 1 including absorbent core 4 with free end region 64 having a larger stress in the crotch portion of the wearer so that the standing property of the parallel spaced upstanding guard/standing gather 6 improves the fit to prevent leakage caused by crossing over of upstanding guard/standing gather 6 (page 7, lines 25-29, figure 4), fastening tape/band fastening member 11 on each side edge of waistband (page 3, lines 5-7, figure 1), stress of the upstanding guard elastic member 64 disposed at the longitudinal free edge end/high stiffness region 63 of 10-1000gf and preferably greater by from 5-500 gf than that of all the remaining upstanding guard elastic members 64 between laterally spaced low stiffness regions ['low stiffness regions' are considered to be any region outside of high stiffness region 63] (page 14, lines 10-12 and figure 1). Okuda further discloses fixed elastic members 64a-64d with a stress of 5-50cN in a 100% stretched condition/fixed extension ratio (page 4, lines 9-10, page 5,

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lines 13-15). Okuda does not expressly disclose a tensile load required to extend standing gathers, rate of increase, or stiffness region width values. Tensile load is a result effective variable since it is at least a result of the material used for the standing gathers. Rate of increase is a result effective variable since it is at least a result of the amount of tensile load applied. Stiffness region width is a result effective variable since it is at least dependent on the overall diaper size. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Okuda with tensile load, rate of increase, and stiffness region width values, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). Okudo further discloses low stiffness regions to be any regions of any shape located outside of high stiffness region 63 (figure 1).

Regarding claims 4-5 Okudo *does not expressly disclose* the crotch portion width, ratio of distances between opposite fixed gather ends and opposite elastic members ( $W1/W2$ ), distance between fixed end of standing gathers on each side of diaper ( $W3$ ) or standing gathers width ( $W4$ ) values. Crotch portion width and aforementioned ratios are result-effective variables since they are a result of the overall article size, types of materials used in standing gathers, etc. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Okuda with crotch portion width and ratio values, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura C. Hill  
Examiner  
Art Unit 3761

LCH



TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

